

# AX-7R

*Stereo Integrated Amplifier*

 Sherwood



# Unpacking and Installation

## Congratulations on Your Purchase!

Your new high fidelity Amplifier is designed to deliver maximum enjoyment and years of trouble free service.

Please take a few moments to read this manual thoroughly. It will explain the features and operation of your Amplifier and help a trouble free installation.

Please unpack your Amplifier carefully. We recommend that you save the carton and packing material. They will be helpful if you ever need to move your unit and may be required if you ever need to return it for service. Your Amplifier is designed to be placed in a horizontal position and it is important to allow at least two inches of space behind your unit for adequate ventilation and cabling convenience.

To avoid early damage, never place the unit near radiators, in front of heating vents, in direct sunlight, or in excessively humid or dusty location.

Connect your complementary components as illustrated in the following section



### WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Caution: To prevent electric shock do not use this (polarized) plug with an extension cord, receptacle or other outlet unless the blades can be inserted to prevent blade exposure.

# Read this Before Operating Your Unit

**FOR THE U.S.A AND CANADA ..... 120 V**

## FOR YOUR SAFETY

Units shipped to the U.S.A and Canada are designed for operation on 120 V AC only.

Safety precaution for a polarized AC plug. However, some products may be supplied with a non-polarized plug.

**CAUTION: TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.**

**FOR THE UNITED KINGDOM ..... 240 V**

## FOR YOUR SAFETY

**PAN-EUROPEAN UNIFIED VOLTAGE**  
All units are suitable for use on supplies 220~240 V AC.

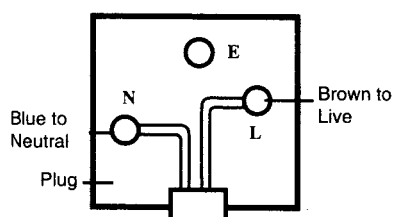
The mains plug must be removed from the wall socket prior to any internal examination.

The wires in this mains lead are coloured in accordance with the following code:

Blue. .... Neutral  
Brown. .... Live

The wires in this mains lead must be connected to the terminals in the plug as follows:

Wire colour  
Blue. .... N or Black  
Brown. .... L or Red



### NOTES:

1. If a 13-amp plug is used, this must be fitted with a 3-amp fuse
2. If a 3-pin plug with earthing contact is used, no wire must be connected to the E terminal

**FOR ADDED SAFETY, WHEN CONNECTING THE AC MAINS LEAD TO A 3PIN PLUG PLEASE USE A 5A FUSE APPROVED BY ASTA TO BS1362, I.E. CARRIES THE**

**ASTA MARK.**



**FOR AUSTRALIA AND EUROPE ..... 220 V/230 V/240 V**

## FOR YOUR SAFETY

Units shipped to Australia are designed for operation on 240 V AC only.

To ensure safe operation the three-pin plug supplied must be inserted only into a standard three-pin power point which is effectively earthed through the normal household wiring. Extension cords used with the equipment must be three-core and be correctly wired to provide connection to earth. Wrongly wired extension cords are a major cause of fatalities. The fact that the equipment operates satisfactorily does not imply that the power point is earthed and that the installation is completely safe. For your safety, if in any doubt about the effective earthing of the power point, consult a qualified electrician.

**PAN-EUROPEAN UNIFIED VOLTAGE**  
All units are suitable for use on supplies 220~240 V AC.

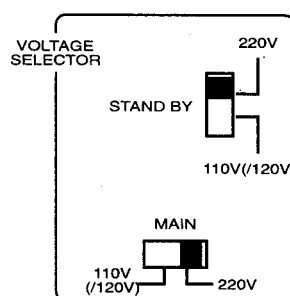
**FOR OTHER COUNTRIES ... 120 V/220 V**

## FOR YOUR SAFETY

Units shipped to countries other than the above countries are equipped with an AC voltage selector switch on the rear panel. Refer to the following paragraph for the proper setting of this switch.

### AC VOLTAGE SELECTION

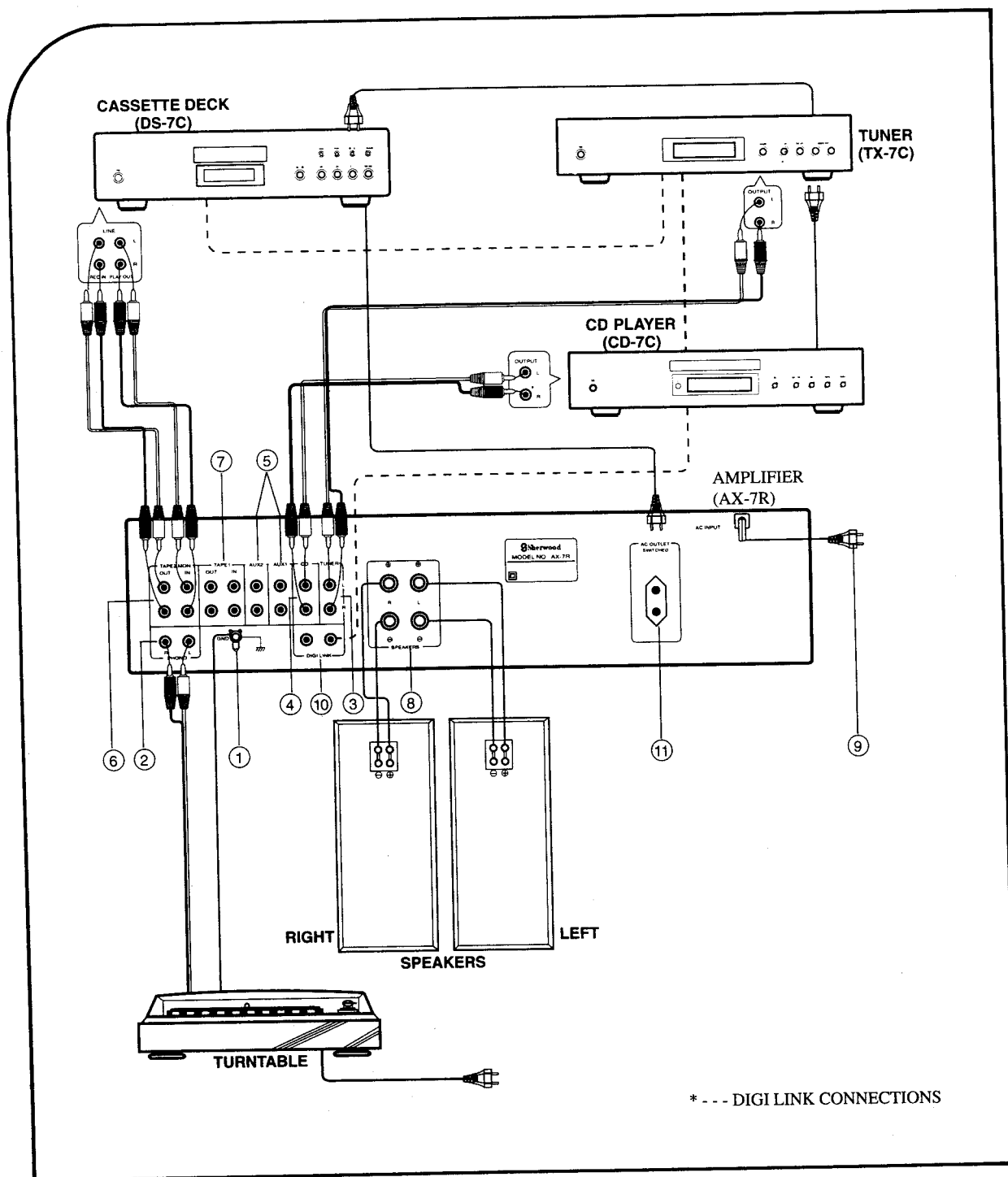
This unit operates on 110-120V AC. Two AC voltage selector switches on the rear panel are set to the voltage that prevails in the area to which the unit is shipped. Before connecting the power cord to your AC outlet, make sure that the setting position of this switch matches your line voltage. If not, it must be set to your voltage in accordance with the following direction



Move switch lever to match your line voltage with a small screwdriver or other pointed tool

## Rear Panel Connections

- ※ Do not plug the AC input cord into the AC outlet when plugging and unplugging connection cords.
  - ※ Make connections firmly and correctly according to the channel (Left and Right) and polarity (+ and -).
- If not, it can cause loss of sound, noise or damage to the unit.



### ① GND TERMINAL

To reduce hum noise, connect the turntable ground lead to this terminal.

### ② PHONO INPUT JACKS

Connect these jacks to the output cords of a turntable with MM (Moving Magnet) type cartridge.

### ③ TUNER INPUT JACKS

Connect these jacks to the OUTPUT jacks of a tuner.

### ④ CD INPUT JACKS

Connect these jacks to the OUTPUT jacks of a CD player.

### ⑤ AUX1/AUX2 INPUT JACKS

These extra jacks are provided for any source you want to hear. An additional CD player, a TV, a VCR or a turntable with ceramic cartridge, etc. can be plugged into these jacks.

### ⑥ TAPE 2 MONITOR JACKS

Connect the INPUT jacks to the LINE OUTPUT jacks of a cassette deck and the OUTPUT jacks to the LINE INPUT jacks of that.

### ⑦ TAPE 1 JACKS

Connect these INPUT and OUTPUT jacks to the LINE OUTPUT and LINE INPUT jacks of an additional cassette deck.

### ⑧ SPEAKER TERMINALS

Connect the left(L) and right(R) speakers to the corresponding speaker terminals. Make sure that the positive(+) and negative(-) terminals on the speaker are connected to the corresponding terminals on the amplifier.

- To avoid power loss in the speaker cables, the wire sizes for the given lengths of cable are recommended as follows.  
Up to 12 meters : 0.75 mm diameter  
Above 12 meters : 1.5 mm diameter  
Above 30 meters : 2.5 mm diameter
- For safe amplifier operation, use the speakers with impedance of 4 ohms to 16 ohms.

### ⑨ AC INPUT CORD

Plug this cord into AC outlet on the wall.

### ⑩ DIGI LINK JACK

Connect this jack to the DIGI LINK jack of Sherwood component such as TX-7C, DS-7C or CD-7C/R to control the connected component remotely by DIGI LINK system.

To control other components, connect the connected component to the component to be controlled referring to the rear panel connection diagram.

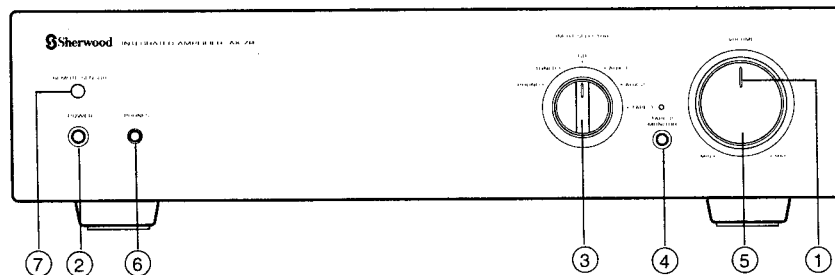
### ⑪ SWITCHED AC OUTLET

Power supplied through this outlet is turned on and off by the POWER button of the amplifier.

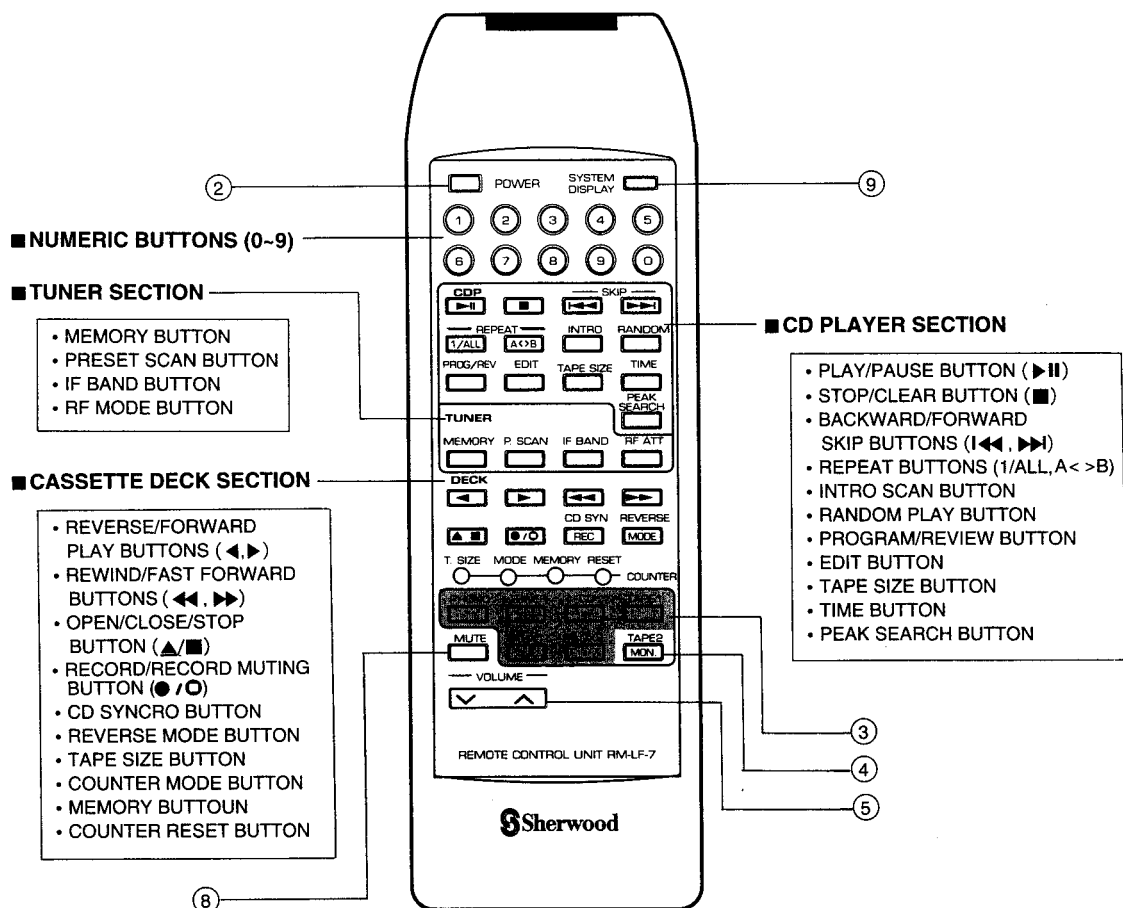
NOTE: The equipment whose power consumption exceeds 100 watts should not be connected.

# Front Panel & System Remote Controls

## FRONT PANEL CONTROLS



## SYSTEM REMOTE CONTROLS



SYSTEM REMOTE CONTROL UNIT

# ① POWER INDICATOR

## ② POWER BUTTON

Press this button to turn the power on, then the POWER indicator lights up.

Press again to turn the power off, then the POWER indicator goes off.

- The power of Sherwood components such as TX-7C, DS-7C and CD-7C/R connected by the DIGI Link is turned on or off together.

## ③ INPUT SELECTOR SWITCH/BUTTONS

Select the desired program source with the INPUT SELECTOR switch or buttons.

- When this unit is connected to Sherwood tuner TX-7C by the DIGI LINK, except for TAPE 2 MONITOR, the character of the selected program source is shown on the FL display of TX-7C.
- When the desired program source is selected with the INPUT SELECTOR buttons in the power off mode, the power is automatically tuned on and the desired program source is selected.

## ④ TAPE 2 MONITOR BUTTON/INDICATOR

When performing playback or recording on the cassette deck connected to the TAPE 2 MONITOR jacks, press this button so that the TAPE 2 MONITOR indicator lights up.

- When the TAPE 2 MONITOR indicator lights up, you can listen to only the sound of the TAPE 2 MONITOR regardless of the position of the INPUT SELECTOR switch.

## ⑤ VOLUME CONTROL/BUTTONS (Up and DOWN)

Adjust the volume to a comfortable listening level with the VOLUME control or buttons.

## ⑥ HEADPHONE JACK

Stereo headphones with a standard 1/4 inch plug can be plugged into this jack for private listening.

## ⑦ REMOTE SENSOR

This receives the signals from the system remote control unit.

## ⑧ MUTE BUTTON

Press this button to temporarily silence the sound. Press again to resume the previous volume.

## ⑨ SYSTEM DISPLAY BUTTON

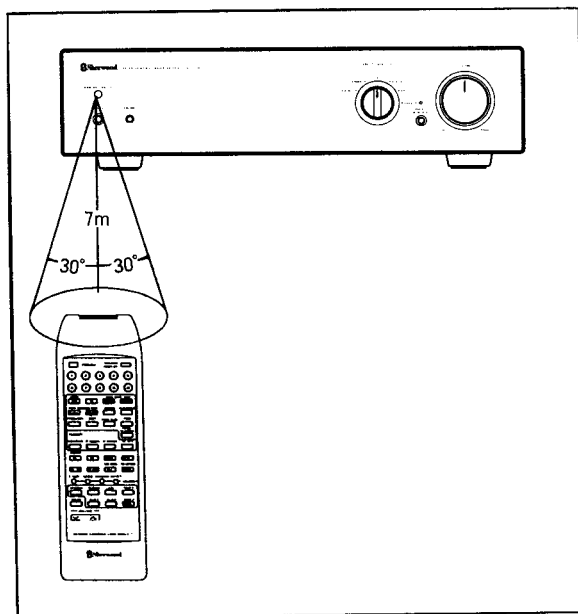
Each time this button is pressed, the brightness of the display of Sherwood components such as TX-7C, DS-7C and CD-7C/R connected by the DIGI LINK changes together as follows.

→ON→ dim→dimmer

- For details about other function buttons on the system remote control unit, refer to the operating instructions of each component such as TX-7C, DS-7C or CD-7C/R.

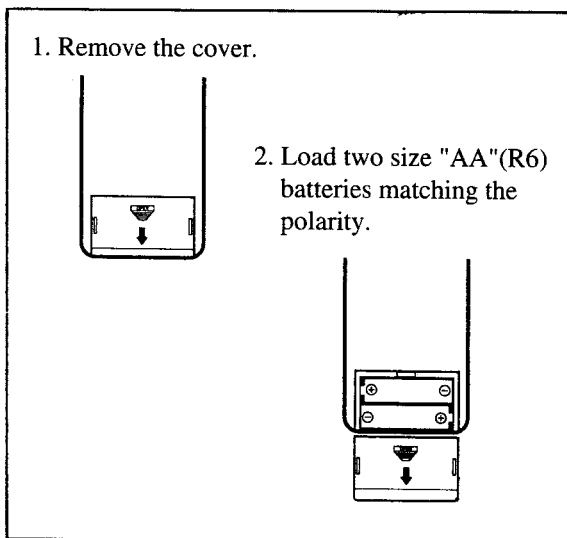
## ■ SYSTEM REMOTE CONTROL OPERATION RANGE

- Use the system remote control unit within a range of about 7 meters (23 feet) and angles of up to 30 degrees aiming at the remote sensor.



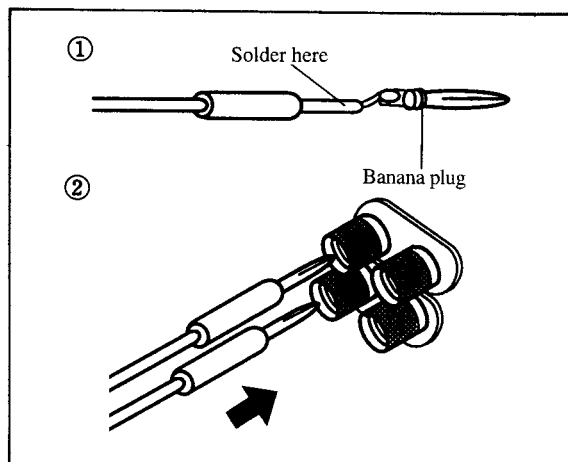
### ■ LOADING THE BATTERIES

- Remove the batteries when it is not used for a long time.
- Do not use the rechargeable batteries (Ni-cd type).



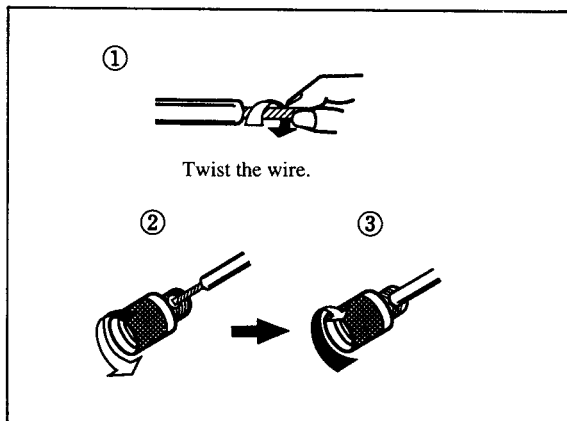
### ■ CONNECTION USING THE BANANA PLUGS

- ① Solder the wire tip to the banana plug and tighten the cover.
- ② Tighten the knob and insert the plug into the hole on the knob.



### ■ GENERAL CONNECTION

- ① Carefully strip about 10 mm of insulation and twist the wire tip.
- ② Loosen the knob and insert the wire.
- ③ Tighten the knob to fix the wire in place.





# Operations

## ■ LISTENING TO THE SOUND

1. Set the VOLUME control to minimum.
2. Press the POWER button to on.
3. Select the desired program source with the INPUT SELECTOR switch or buttons or TAPE 2 MONITOR button.
  - When you want to listen to a music source other than the TAPE 2 MONITOR, press the TAPE 2 MONITOR button to off so that the TAPE 2 MONITOR indicator goes off.
4. Operate the selected component for playback.
5. Adjust the volume to a comfortable listening level with the VOLUME control or buttons.
6. When answering the telephone, etc., press the MUTE button to temporarily silence the sound. Then the POWER indicator flickers. Press again to resume the previous volume.
7. For private listening, plug a 1/4 inch plug of the headphone into the HEADPHONE jack.
  - When the headphones are plugged, the sound from the speakers is cut off.

## ■ RECORDING WITH A CASSETTE DECK

### ■ RECORDING WITH THE TAPE 1

- When the TAPE 2 MONITOR indicator lights up, press the TAPE 2 MONITOR button to off.
1. Select the program source to be recorded with the INPUT SELECTOR switch or buttons.
  2. Start recording on the cassette deck connected to the TAPE 1.
  3. Play the desired program source.

### ■ RECORDING WITH THE TAPE 2 MONITOR

1. Select the program source to be recorded with the INPUT SELECTOR switch or buttons.
2. Start recording on the cassette deck connected to the TAPE 2 MONITOR.
3. Play the desired program source.
  - When the cassette deck connected to the TAPE 2 MONITOR is a 3 head cassette deck, press the TAPE 2 MONITOR button to on to monitor the recorded sound through the speakers during recording on the TAPE 2 MONITOR cassette deck.

## ■ COPYING THE TAPES

1. Select the TAPE 1 as a program source to be recorded.
2. Press the TAPE 2 MONITOR button so that the TAPE 2 MONITOR indicator lights up.
3. Start recording on the cassette deck connected to the TAPE 2 MONITOR.
4. Play back on the cassette deck connected to the TAPE 1.
  - Copying from the TAPE 2 MONITOR to the TAPE 1 is not possible.

# Troubleshooting Guide

If your amplifier should not perform as expected, consult the table below to see if the problem can be corrected before seeking help from your dealer or our service organization.

PROBLEM	POSSIBLE CAUSE	REMEDY
No power (the POWER indicator does not light up).	<ul style="list-style-type: none"> <li>• The AC input cord is disconnected.</li> <li>• The POWER button is not pressed correctly.</li> </ul>	<ul style="list-style-type: none"> <li>• Connect the cord securely.</li> <li>• Press the POWER button to ON.</li> </ul>
No sound	<ul style="list-style-type: none"> <li>• Speaker cables are disconnected.</li> <li>• Incorrect connections between the components.</li> <li>• The volume is adjusted to minimum level.</li> <li>• The MUTE button is pressed to ON.</li> <li>• Incorrect selection of program source.</li> </ul>	<ul style="list-style-type: none"> <li>• Check the speaker connections.</li> <li>• Make connections correctly.</li> <li>• Adjust the volume.</li> <li>• Press the MUTE button to cancel the muting effect.</li> <li>• Select the desired program source correctly.</li> </ul>
No recording	<ul style="list-style-type: none"> <li>• Incorrect connections</li> <li>• Incorrect operation of the cassette deck.</li> </ul>	<ul style="list-style-type: none"> <li>• Make connection correctly.</li> <li>• Operate the cassette deck correctly.</li> </ul>

# Specifications

Continuous Average Power Output per channel, both channel driven.

IEC standard, 20~20000 Hz, at 8 ohms,

with no more than 0.05 % THD .....50 W

DIN standard, at 1 kHz, 8 ohms .....62 W

DIN standard, at 1 kHz, 4 ohms .....93 W

IMD, 60 Hz : 7 kHz = 4 : 1 SMPTE, at 50 W, 8 ohms .....0.003 %

THD, at 1 kHz, 50 W, 8 ohms .....0.006 %

Damping Factor, at 1 kHz, 8 ohms .....120

Input Sensitivity for 50 W output, 8 ohms, 1 kHz

PHONO (MM) .....2.5 mV

TUNER/CD/AUX/TAPE .....160 mV

Phono Input Overload, at 1 kHz,

with no more than 0.7 % THD .....180 mV

Signal to Noise Ratio (ref. rated power output, A wtd)

PHONO (MM) .....76 dB

TUNER/CD/AUX/TAPE .....103 dB

Frequency Response

PHONO (MM), RIAA 30~20,000 Hz .....± 0.5 dB

TUNER/CD/AUX/TAPE, at 1 W, -3 dB .....5 Hz~280 kHz

Function Crosstalk

AUX to CD, at 1 kHz/10 kHz .....90 dB

## ■ GENERAL

Power Requirement .....See type plate at the rear of the unit

Power Consumption .....460 W

Dimensions (W × H × D) .....440 × 100 × 330 mm  
(17-5/16 × 3-7/8 × 12-15/16 inches)

Weight (Net) .....10.5 kg (23.2 lbs)

Note: Specifications and design subject to change without notice for improvements.